Region One Fisheries
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ENVIRONMENTAL ASSESSMENT AND DECISION NOTICE FOR THE LOWER BOULDER LAKE AND BOULDER CREEK RESTORATION PROJECT

August 28, 2009

Project Proposal and Justification:

Upper and lower Boulder Lakes are located approximately 15 miles southwest of Eureka, Montana, and are accessed from the Boulder Creek Road (USFS Road 337). Lower Boulder Lake has a surface area of 6.0 acres and a maximum depth of approximately 13 feet. Boulder Creek begins at the outlet of Lower Boulder Lake and flows approximately 8 miles across public land (USFS) before flowing into Lake Koocanusa. The Boulder Creek watershed was likely historically fishless due primarily to the presence of a natural falls barrier located approximately 1.7 miles upstream from the Forest Development Road (USFS Road 228). FWP stocked Upper Boulder Lake in 1953 with an undesignated strain of cutthroat trout, and Lower Boulder Lake was stocked the following year with a similar group of fish. Boulder Creek was stocked with rainbow trout in 1944 and once with an undesignated strain of cutthroat trout in 1946. Upper Boulder Lake is currently fishless, would not require rotenone treatment, and would not be stocked with trout as part of this project. Limited water and steep gradient prevent fish in the lower lake from migrating into the upper lake. Currently, the fish residing in Boulder Creek and Lower Boulder Lake are a hybridized population, with individuals containing characteristics from Yellowstone, westslope cutthroat, and rainbow trout ancestry.

The objectives of this project are to expand the current distribution within the historic range of westslope cutthroat trout in the Kootenai River Subbasin while continuing to provide angling opportunity within the Boulder Creek watershed. Historically, westslope cutthroat trout were likely the dominant salmonid species in the Montana portion of the Kootenai River Subbasin upstream of the present location of Libby Dam. Today genetically pure populations only exist in the headwater regions of Dodge, Young, and Grave Creeks. This project would expand the distribution of genetically pure westslope cutthroat trout in the Montana portion of the Kootenai watershed upstream of Libby Dam by approximately twenty percent.

FWP would use various formulations of rotenone to remove all fish from Lower Boulder Lake and Boulder Creek and restock these waters with westslope cutthroat trout from the Washoe Park state fish hatchery in Anaconda.

Location of Project:

This project would be conducted within the Boulder Creek watershed that is located approximately 15 miles southwest of the city of Eureka, Montana. Specifically, Lower Boulder Lake is located within Township 36 North, Range 30 West, Section 35, Lincoln County, Montana. Forest Service manages all the property where the proposed activities would occur.

Environmental and Social Impacts of Project:

This project is designed to kill nonnative and hybridized fish presently found in Lower Boulder Lake and Boulder Creek. Hybridized Yellowstone cutthroat trout is the only fish species found in these waters, and this project's objective is the removal of these fish from the lake and creek. The impacts to recreational users from this project are expected to be short term and minor due to the following reasons. The lake and creek would be restocked with pure westslope cutthroat trout the following spring after the last rotenone treatment is completed. Rotenone naturally degrades through exposure to air and sunlight relatively rapidly. To help ensure that aquatic life and water quality in Lake Koocanusa will not be affected, CFT Legumine and the powdered rotenone formulation used in this project will be detoxified with potassium permanganate approximately 0.1 miles upstream of Lake Koocanusa.

FWP expects the impacts to nontarget invertebrates within the project area to be minimal based on the resilient nature of most invertebrates to the chemicals used for this project. FWP also expects impacts to be minimal to amphibians and reptiles as a result of this project and further minimized by implementing the project during the late summer/fall, when larval life stages are less likely to be present in the area. FWP expects this project to have little or no adverse effect on mammals or birds occupying the area, based on research that has shown that rotenone is not toxic to mammals and birds at the fish-killing concentrations that will be used for this project. This project is also not likely to have secondary effects, such as displacement, on any local populations of birds or mammals. Project personnel activity during project completion may be slightly higher than existing recreational use during the remainder of the summer and fall, but should have no effect on sensitive animal displacement. The fish community in Lower Boulder Lake and Boulder Creek are unlikely to be a substantial food source for any of these sensitive animal species. Therefore removing these fish from these waters will have little or no impact on any of these species.

The risk that rotenone will enter and be mobile in groundwater is minimal. Tests have shown that rotenone will not transport through sediments. There are no

domestic wells or existing water rights located within the project area. FWP will also follow the manufacturer's label recommendations that advise using sentinel fish (cutthroat trout in this case) to ensure the product has adequately degraded after treatment is concluded. Risks to applicators are substantially greater than risks to the general public because of the necessity of handling the compounds at full strength. Measures to reduce risks to applicators include training, proper handling, and the use of safety equipment listed on the product labels such as respirator, goggles, rubber boots, Tyvek overalls, and nitrile gloves. All applicators would be trained on the safe handling and application of the piscicide. At least one, and most likely several, Montana Department of Agriculture certified pesticide applicator(s) would supervise and administer the project. Rotenone and potassium permanganate would be transported, handled, applied, and stored according to the label specifications to reduce the probability of human exposure or spill. Health risk to project personnel will be minimized through the use of proper planning, preparation, and the use of personal protective gear.

The risk of exposure of these chemicals to the public will also be minor. Signs notifying the public of the project will be posted in the area at the access route to the Boulder Lake trailhead. FWP will further limit human exposure of the chemicals used for this project to the public by closing the site to public use immediately before and during treatment, collecting dead fish from the site, containing the treatment within the designated zone by detoxifying the piscicides, and posting signs within the project area that indicate no drinking, no swimming, and no eating dead fish.

Fish will not be stocked into Lower Boulder Lake or Boulder Creek until the toxic effects are gone, as specified on the product labels. FWP will use caged fish (cutthroat trout) to determine toxicity. Stocked fish will not accumulate residues of rotenone from the water.

Public Involvement:

In compliance with the Montana Environmental Policy Act, an environmental assessment (EA) was prepared and circulated for public comment from July 27 through August 27, 2009. Notices were placed in three local newspapers (Daily Inter Lake, Tobacco Valley News, and The Western News), a news release was done, and notification was mailed to local conservation groups, timber companies, selected businesses, and natural resource agencies. Copies of the EA were made available at three local libraries, the state library in Helena, the FWP Region 1 headquarters in Kalispell, and the FWP internet web site. FWP did not receive any public comments.

Decision Notice:

Based on the lack of comments and issues we received during the public comment period for the draft EA for the Lower Boulder Lake and Boulder Creek

Restoration Project, we have prepared the final EA for this project. No changes were made to the draft EA; therefore, the draft will become the final document together with this decision notice. Due to the urgent need to restore westslope cutthroat trout to part of their historic range, I recommend that we implement plans to remove the nonnative fishes from Lower Boulder Lake and Boulder Creek and restock the lake with westslope cutthroat trout as soon as possible.

James R. Satterfield, Jr.

August 28, 2009

James R. Satterfield, Jr., Ph.D. Date
Regional Supervisor